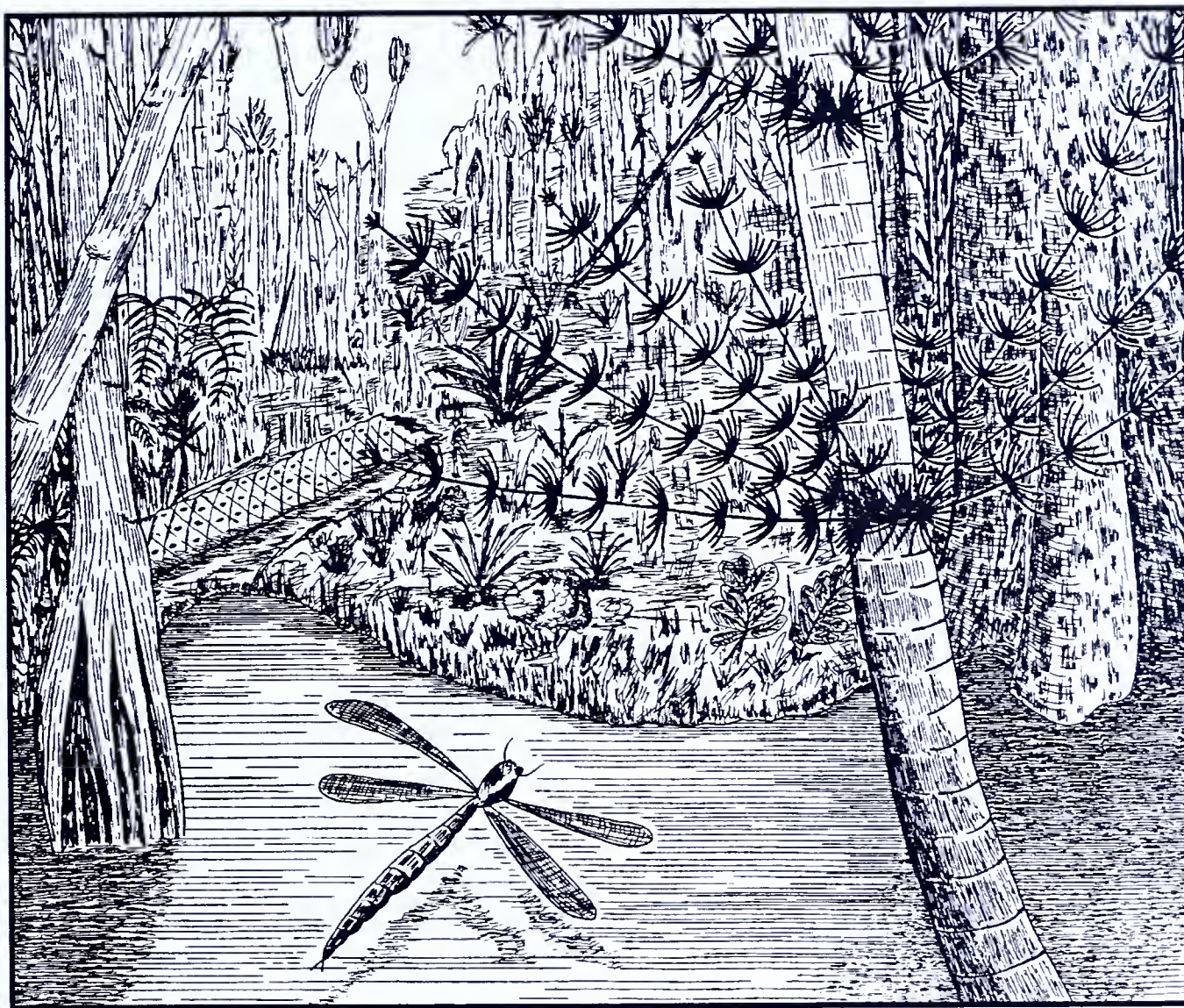




PENNSYLVANIA GEOLOGICAL PUBLICATIONS



COMMONWEALTH OF PENNSYLVANIA
Edward G. Rendell, Governor
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
Michael DiBerardinis, Secretary
OFFICE OF CONSERVATION AND ENGINEERING SERVICES
Larry G. Williamson, Deputy Secretary
BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY
Jay B. Parrish, Director

June 2007

PENNSYLVANIA STATE LIBRARY
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PENNSYLVANIA GEOLOGICAL SURVEY PUBLICATIONS ARE DEPOSITED AT THE LIBRARIES LISTED BELOW

Not all libraries have complete sets of Survey publications. Please call to check availability of the publication of interest and the hours of library operation. Some college libraries are not open to the general public.

Aliquippa	B. F. Jones Memorial Library	Media	Delaware County Institute of Science Library
Allentown	Allentown Public Library Muhlenberg College Library	Middletown	Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey
Altoona	Altoona Area Public Library	Millersville	Millersville University, Ganzer Library
Ambridge	Laughlin Memorial Free Library	Monessen	Monessen Public Library
Athens	Spalding Memorial Library	New Castle	New Castle Public Library
Bethel Park	Bethel Public Library	Newtown	Bucks County Community College Library
Bethlehem	Bethlehem Public Library Lehigh University, Department of Geology Lehigh University, Fairchild/Martindale Library Moravian College, Reeves Library	New Wilmington	Westminster College, McGill Library
Bloomsburg	Bloomsburg University, Andruss Library	Norristown	Montgomery County-Norristown Public Library
Bradford	University of Pittsburgh at Bradford Library	Oil City	Oil City Library
Broomall	Marple Public Library	Philadelphia	Academy of Natural Sciences Library American Philosophical Society Library Free Library of Philadelphia Historical Society of Pennsylvania Jenkins Law Library La Salle College, Department of Geology Temple University, Department of Geology Temple University, Paley Library University of Pennsylvania, Van Pelt Library
Bryn Mawr	Bryn Mawr College, Canaday Library Bryn Mawr College, Bryn Mawr-Haverford Library	Pittsburgh	Carnegie Library of Pittsburgh Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey University of Pittsburgh, Hillman Library
Butler	Butler Public Library	Pottsville	Pottsville Free Public Library
California	California University, Manderino Library of Pennsylvania	Punxsutawney	Punxsutawney Memorial Library
Carlisle	Dickinson College, Spahr Library	Reading	Reading Museum Library Reading Public Library
Chambersburg	Conococheague District Library	Scranton	Scranton Public Library
Cheyney	Cheyney University, Hill Library	Selinsgrove	Susquehanna University Learning Center
Clarion	Clarion University, Carlson Library	Sharon	Buhl-Henderson Community Library
Collegeville	Ursinus College, Myrin Library	Shippensburg	Shippensburg University, Ezra Lehman Memorial Library
Doylestown	Bucks County Free Library	Slippery Rock	Slippery Rock University, Department of Geology Slippery Rock University, Bailey Memorial Library
Easton	Easton Area Public Library Lafayette College, Skillman Library	Somerset	Somerset County Library
East Stroudsburg	East Stroudsburg University, Kemp Library	Swarthmore	Swarthmore College, McCabe Library
Edinboro	Edinboro University, Baron-Forness Library	Troy	Bradford-Wyoming County Library
Emporium	Cameron County Public Library	Uniontown	Uniontown Public Library
Erie	Erie County Library System Gannon University, Nash Library	University Park	Pennsylvania State University, Earth and Mineral Science Library Pennsylvania State University, Pattee Library
Exton	Chester County Library	Villanova	Villanova University, Falvey Library
Harrisburg	Dauphin County Library System	Warren	Warren Public Library
Hazleton	Pennsylvania State University, Hazleton Campus Library	Washington	Citizens Library
Huntington	Juniata College, Beeghly Library	Waynesburg	Waynesburg College Library
Indiana	Indiana University of Pennsylvania Library	West Chester	West Chester University, Francis Harvey Green Library
Jim Thorpe	Dimmick Memorial Library	Wilkes-Barre	Osterhout Free Library
Johnstown	Cambria County Library System	Williamsport	Pennsylvania College of Technology, Learning Resources Center
Kutztown	Kutztown University, Rohrbach Library	Youngwood	Westmoreland County Community College, Learning Resources Center
Lancaster	Franklin and Marshall College Library Lancaster County Library		
Langhorne	Bucks County Free Library, Pennwood Branch		
Latrobe	St. Vincent College Library		
Lewisburg	Bucknell University, Ellen Clarke Bertrand Library		
Lincoln University	Lincoln University, Langston Hughes Memorial Library		
Lock Haven	Lock Haven University, Stevenson Library Ross Library		
Mansfield	Mansfield University Library		
Meadville	Allegheny College, Pelletier Library		

PENNSYLVANIA GEOLOGICAL PUBLICATIONS

Compiled by Caron O'Neil and Anne B. Lutz

Pennsylvania Geological Survey

COVER: A typical scene of a Pennsylvanian-age coal swamp. Such swamps were common throughout much of Pennsylvania about 300 million years ago. Vegetation accumulated, was buried, and later was converted to the bituminous and anthracite coal beds mined in Pennsylvania today. The ancestral dragonfly in the foreground had a wingspread of about 2 feet. Drafted by John G. Kuchinski.

PENNSYLVANIA GEOLOGICAL SURVEY

FOURTH SERIES

HARRISBURG

2007

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SUPPLEMENT TO JUNE 2007 LIST OF PUBLICATIONS

HOW TO ORDER PUBLICATIONS

Unless otherwise noted, **free publications** and **open-file reports** may be obtained from:

Department of Conservation and Natural Resources
Bureau of Topographic and Geologic Survey
3240 Schoolhouse Road
Middletown, PA 17057-3534
717-702-2017

Cost publications may be purchased over the counter or by mail from:

State Bookstore
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120-0053
717-787-5109

COST PUBLICATIONS: Orders sent to the State Bookstore should include \$4.00 postage for the first publication and \$0.50 for each additional publication (the exception is Special Publication 1; see page 32 for pricing information and page 51 for an order form). Add **6 percent state sales tax** to the price of all publications purchased over the counter or mailed to a Pennsylvania address (tax also applies to shipping and handling charges). If an order is to be mailed to a foreign address, there will be an additional charge for postage and handling; please call the State Bookstore for details. Make check or money order payable to **Commonwealth of Pennsylvania**. VISA and MasterCard are also accepted, as are orders by telephone. If desired, an invoice can be sent. Stamps will not be accepted as payment. An order form is included for your convenience on page 49.

OPEN-FILE REPORTS: Orders sent to the Bureau for open-file reports to be mailed to a Pennsylvania address should include **6 percent state sales tax**. Make check or money order payable to **Commonwealth of Pennsylvania**. Credit cards will not be accepted. An order form is included for your convenience on page 53.

FREE PUBLICATIONS (no charge for shipping/handling): These publications may be requested from the Bureau. Classroom quantities are limited to 30 per publication. An order form is included for your convenience on page 57. The Bureau reserves the right to limit quantities.

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NEW PUBLICATIONS

EDUCATIONAL SERIES

ES 8	Oil and gas in Pennsylvania , K. J. Flaherty and Thomas Flaherty, III. 2nd ed., 2002; 3rd printing, 2007. 32 p.	free‡
ES 10	Earthquake hazard in Pennsylvania , C. K. Scharnberger. 2nd ed., 2003; 4th printing, 2007. 14 p.	free‡

MINERAL RESOURCE REPORTS

M 101	Bedrock geologic map, coal-resource maps, and digital datasets of part of the Windber quadrangle, Somerset County, Pennsylvania , J. R. Shaulis. 2007. 13 p., 9 pls., 31 datasets, bedrock geol. map, coal-resource maps, scales 1:24,000 and 1:62,500, CD-ROM	5.00
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OPEN-FILE REPORTS

OFBM 07-01.0	Bedrock geologic map of the southern portion of the Gap quadrangle, Lancaster County, Pennsylvania , Howell Bosbyshell. 2007. 14 p., bedrock geol. map	‡
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OFBM 07-02.0	Bedrock geology of the Allensville quadrangle, Huntingdon and Mifflin Counties, Pennsylvania , T. A. McElroy and D. M. Hoskins. 2007. 26 p., bedrock geol. map	‡
OFBM 07-03.0	Bedrock geologic map of the Conestoga and Quarryville quadrangles, Lancaster County, Pennsylvania , G. C. Blackmer. 2007. 16 p., bedrock geol. map	‡
OFBM 07-04.0	Bedrock geologic map of the northern portion of the Holtwood and Wakefield quadrangles, Lancaster and York Counties, Pennsylvania , J. C. Hill. 2007. 16 p., bedrock geol. map	‡
OFBM 07-05.0	Preliminary bedrock geologic map of the middle portion of the Susquehanna River valley, Cumberland, Dauphin, and Perry Counties, Pennsylvania , M. S. Jackson, P. M. Hanley, and P. B. Sak. 2007. 16 p., bedrock geol. map, scale 1:30,000	‡
OFGG 08-01.0	Geology of the Gettysburg Battlefield—How Mesozoic events and processes impacted American history , R. J. Cuffey, J. D. Inners, G. M. Fleeger, and others. 2008. 16 p.	‡
OFOG 07-01.0	Subsurface rock correlation diagram, oil and gas producing regions of Pennsylvania . K. M. Carter. 2007 (replaces OF 79-01, 1979)	‡
OFMR 08-01.0	A study of coal availability in the Clymer 7.5-minute quadrangle, Indiana County, Pennsylvania , V. W. Skema, L. J. Lentz, J. C. Neubaum, and Rose-Anna Behr. 2008. 104 p.	‡
OFSM 07-08.0	Surficial geology of the Harveys Lake 7.5-minute quadrangle, Luzerne County, Pennsylvania , D. D. Braun. 2007. 19 p., surficial geol. map	‡
OFSM 07-09.0	Surficial geology of the Elk Grove 7.5-minute quadrangle, Sullivan, Columbia, and Lycoming Counties, Pennsylvania , D. D. Braun. 2007. 21 p., surficial geol. map	‡
OFSM 07-10.0	Surficial geology of the Red Rock 7.5-minute quadrangle, Luzerne, Sullivan, and Columbia Counties, Pennsylvania , D. D. Braun. 2007. 19 p., surficial geol. map	‡
OFSM 07-11.0	Surficial geology of the Trout Run 7.5-minute quadrangle, Lycoming County, Pennsylvania , D. D. Braun. 2007. 26 p., surficial geol. map	‡
OFSM 07-12.0	Surficial geology of the Lenoxville 7.5-minute quadrangle, Susquehanna, Lackawanna, and Wyoming Counties, Pennsylvania , D. D. Braun. 2007. 15 p., surficial geol. map	‡
OFSM 07-13.0	Surficial geology of the Carbondale 7.5-minute quadrangle, Lackawanna County, Pennsylvania , D. D. Braun. 2007. 16 p., surficial geol. map	‡
OFSM 07-14.0	Surficial geology of the Moscow 7.5-minute quadrangle, Lackawanna County, Pennsylvania , D. D. Braun. 2007. 15 p., surficial geol. map (replaces OF 99-05, 2005)	‡

CHANGED AVAILABILITY

GENERAL GEOLOGY REPORTS

G 75	Stratigraphic correlation chart of Pennsylvania , T. M. Berg, M. K. McInerney, J. H. Way, and D. B. MacLachlan. 1983; 3rd printing, revised, 1993. 1 sheet, 42" x 58", plus 2 p. addendum	5.00
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MAPS

# 1	Geologic map of Pennsylvania , compiled by T. M. Berg, W. E. Edmunds, A. R. Geyer, and others. 2nd ed., 1980. Scale 1:250,000. (Map covers two 42" x 58" sheets; a third sheet, 42" x 29", contains geol. cross sections.) Available unfolded only.....	10.50
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OPEN-FILE REPORTS

OF 98-03	Rocks and ruins of the "Upper Grand"—An illustrated trail guide to the geology and historical archeology of Lehigh Gorge State Park, northeastern Pennsylvania , J. D. Inners. 1998. 62 p., 6 pls., bedrock geol. map, scale 1:100,000	3.00†
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OPEN-FILE REPORTS THAT ARE NO LONGER AVAILABLE

OF 73-01 OF 81-01 OF 94-01

REPLACED OPEN-FILE REPORTS

OF 79-01 (replaced by OFOG 07-01.0) OF 99-05 (replaced by OFSM 07-14.0)

REVISED OPEN-FILE REPORTS

OFSM 06-09.0 (revised to OFSM 06-09.1)

OUT-OF-PRINT PUBLICATIONS

IC 62 M 6, Pt. 2 PR 167 SB 6

OUT-OF-PRINT PUBLICATIONS THAT ARE NOW AVAILABLE ONLINE

A 138ab A 148ab IC 66 W 15 W 16 W 38 W 49 W 56



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HOW TO ORDER PUBLICATIONS

Unless otherwise noted, **free publications** and **open-file reports** may be obtained from:

Department of Conservation and Natural Resources
Bureau of Topographic and Geologic Survey
3240 Schoolhouse Road
Middletown, PA 17057-3534
717-702-2017

Cost publications may be purchased over the counter or by mail from:

State Bookstore
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120-0053
717-787-5109

COST PUBLICATIONS: Orders sent to the State Bookstore should include \$4.00 shipping/handling for the first publication and \$0.50 for each additional publication (the exception is Special Publication 1; see page 32 for pricing information and page 53 for an order form). Add **6 percent state sales tax** to the price of all publications purchased over the counter or mailed to a Pennsylvania address (tax also applies to shipping/handling charges). If an order is to be mailed to a foreign address, there will be an additional charge for postage and handling; please call the State Bookstore for details. Make check or money order payable to **Commonwealth of Pennsylvania**. VISA and MasterCard are also accepted, as are orders by telephone. If desired, an invoice can be sent. Stamps will not be accepted as payment. An order form is included for your convenience on page 51.

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FREE PUBLICATIONS (shipping/handling charge required): These publications may be requested from the Bureau. Orders should include \$4.00 postage for the first publication and \$0.50 for each additional publication. Make check or money order payable to **Commonwealth of Pennsylvania**. Credit cards will not be accepted. An order form is included for your convenience on page 59. The Bureau reserves the right to limit quantities.

HOW TO OBTAIN TOPOGRAPHIC MAPS OF PENNSYLVANIA

Topographic maps of Pennsylvania are prepared by the U.S. Geological Survey in cooperation with the Pennsylvania Bureau of Topographic and Geologic Survey. Persons wishing to know the names and scales of topographic maps that are available for Pennsylvania should refer to **Pennsylvania—Index to Topographic and Other Map Coverage**. Names, dates, and prices of maps currently available are listed in **Catalog of Topographic and Other Published Maps**. Both of these publications are free upon request from either of the following agencies:

Department of Conservation and Natural Resources
Bureau of Topographic and Geologic Survey
3240 Schoolhouse Road
Middletown, PA 17057-3534
717-702-2017
www.dcnr.state.pa.us/topogeo/

U.S. Geological Survey Information Services
P. O. Box 25286
Denver, CO 80225
1-888-ASK-USGS
topomaps.usgs.gov/

Topographic maps may be purchased from the U.S. Geological Survey at the address listed in the right-hand column above. Ordering information and order forms are included in **Catalog of Topographic and Other Published Maps**.

THE GEOLOGICAL SURVEYS OF PENNSYLVANIA

There have been four geological surveys of Pennsylvania and four resulting series of publications:

First Survey, 1836–1842, 1851–1858: Publications—6 annual reports, 2 quarto-volumes, and a state geologic map.

Second Survey, 1874–1895: Publications—81 volumes, 35 atlases, and 6 grand atlases.

Third (Commission) Survey, 1899–1919: Publications—6 biennial reports and 12 economic reports, some of which are listed in this book.

Fourth Survey, 1919–present: Most publications (fourth series) are listed in this book. The list does not include superseded or replaced reports that are out of print.

All reports of the first three geological surveys and some of the reports of the present (fourth) survey are out of print.

SOURCES OF OUT-OF-PRINT REPORTS

Many hard-copy reports appearing in this list of publications are marked with an asterisk (*), indicating that they are out of print and no longer available for distribution. Some reports are marked with a dagger (†), indicating that they are temporarily out of print and that new editions are in preparation. Out-of-print reports are available for study in many libraries throughout the state (see list on inside front cover). Some of these publications have been released as online editions (see below).

The library of the Bureau of Topographic and Geologic Survey, 3240 Schoolhouse Road, Middletown, telephone 717-702-2020, is open for public use and contains most of the Pennsylvania Geological Survey reports, as well as many of the U.S. Geological Survey and other governmental and institutional reports related to Pennsylvania.

ONLINE PUBLICATIONS

Some of the reports in this list of publications are available online and are marked with a double dagger (‡). They fall into three categories: (1) publications released in digital form on the Bureau's web site, (2) reports released in hard-copy form but also available as PDF files on the Bureau's web site, and (3) out-of-print hard-copy reports that are now available on the Bureau's web site or on another web site. Links to the pertinent web sites are provided for each online publication at www.dcnr.state.pa.us/topogeo/pub/index.aspx.

MAP SCALES

Common map scales referred to in the list of publications and their equivalent distances are as follows:

SCALE	EQUIVALENT DISTANCE	SCALE	EQUIVALENT DISTANCE
1:6,000	1 inch = 500 feet	1:125,000	1 inch = approx. 2 miles
1:12,000	1 inch = 1,000 feet	1:250,000	1 inch = approx. 4 miles
1:16,000	1 inch = 1,333 feet	1:500,000	1 inch = approx. 8 miles
1:24,000	1 inch = 2,000 feet	1:380,160	1 inch = 6 miles
1:48,000	1 inch = 4,000 feet	1:1,000,000	1 inch = approx. 16 miles
1:50,000	1 inch = 4,167 feet	1:2,000,000	1 inch = approx. 32 miles
1:62,500	1 inch = approx. 1 mile	1:2,500,000	1 inch = approx. 40 miles

Other map scales cited in the list are followed by their equivalent distances.

FORMAT AND SYMBOLS

The list of publications is arranged by series of reports in alphabetical order. Within each series, the reports are listed in numerical order. In the three-column format, the left column indicates the report series and number. The middle column contains bibliographic information such as the title, author(s), year of publication, number of pages, and number of plates. Also included in this column are notations of bedrock and surficial geologic maps, economic geologic maps, and other maps of particular interest, as well as the scales of the maps. The right column contains information on the printing status or availability of each report and prices of reports that are in print. The symbols used in the right column are as follows:

SYMBOL	MEANING
*	Out of print (see "Sources of Out-of-Print Reports" at the top of this page)
◇	Available free (shipping/handling charge required)
†	Temporarily out of print; new edition in preparation
‡	Available online (see "Online Publications" above)

LIST OF PUBLICATIONS

PENNSYLVANIA GEOLOGICAL SURVEY

Fourth Series

ATLAS SERIES

(Map scale 1:24,000 unless otherwise indicated.)

A 5	New Castle quadrangle—Geology and mineral resources (Bessemer, New Castle South, New Galilee, and Beaver Falls 7.5-minute quadrangles, Lawrence and Beaver Counties, and part of East Palestine and New Middletown 7.5-minute quadrangles, Columbiana County, Ohio), F. W. DeWolf. 1929. 238 p., 18 pls., bedrock geol. map, surficial geol. map, econ. geol. map, scale 1:62,500.....	* ‡
A 27	Geology and mineral resources of the Pittsburgh quadrangle, Pennsylvania (Pittsburgh East, Braddock, Glassport, and McKeesport 7.5-minute quadrangles, Allegheny and Westmoreland Counties), M. E. Johnson. 1929; 3rd printing, 1974. 236 p., 33 pls., geol. map, min. resource map, scale 1:62,500	*
A 33a	Geology and mineral resources of the Oil City quadrangle, Venango County, Pennsylvania , A. N. Ward, Jr., M. T. Lukert, and W. F. Chapman. 1979. Geol. map and text on 1 pl.	6.00
A 36	Freeport quadrangle—Geology and mineral resources (Freeport, Leechburg, New Kensington East, and Vandergrift 7.5-minute quadrangles, Armstrong, Westmoreland, Allegheny, and Butler Counties), H. H. Hughes. 1933. 272 p., 9 pls., geol. map, scale 1:62,500.....	*
A 37	Mineral resources of the Greensburg quadrangle, Westmoreland County, Pennsylvania (Murrysville, Slickville, Irwin, and Greensburg 7.5-minute quadrangles), M. E. Johnson. 1925; 3rd printing, 1974. 162 p., 13 pls., geol. map, econ. geol. map, scale 1:62,500.....	*
A 48	Geology and mineral resources of the Donegal quadrangle, Pennsylvania (Mammoth, Stahlstown, Donegal, and Seven Springs 7.5-minute quadrangles, Westmoreland, Fayette, and Somerset Counties), M. N. Shaffner. 1963. 116 p., 4 pls., geol. map, coal reserve maps, scale 1:62,500	4.00
A 54	Geology and mineral resources of the Brookville quadrangle, Pennsylvania (Corsica, Brookville, Summerville, and Coolspring 7.5-minute quadrangles, Jefferson and Clarion Counties), C. K. Graeber and R. M. Foose. 1942; 3rd printing, 1974. 136 p., 16 pls., geol. map, min. resource map, scale 1:62,500.....	*
A 55	Geology and mineral resources of the Smicksburg quadrangle, Pennsylvania (Dayton, Valier, Plumville, and Marion Center 7.5-minute quadrangles, Jefferson, Indiana, and Armstrong Counties), M. N. Shaffner. 1946; 2nd printing, 1969. 252 p., 11 pls., geol. map, min. resource map, scale 1:62,500	10.50
A 57	Geology and mineral resources of the New Florence quadrangle, Pennsylvania (Bolivar, New Florence, Wilpen, and Rachelwood 7.5-minute quadrangles, Indiana, Westmoreland, Cambria, and Somerset Counties), M. N. Shaffner. 1958. 165 p., 13 pls., geol. and min. resource map, scale 1:62,500; coal reserve maps, scale approx. 1:84,000 (1 in. = approx. 1.3 mi)	6.00
A 64	Geology and mineral resources of the Hazen, Falls Creek, Reynoldsville, and DuBois quadrangles, Clearfield and Jefferson Counties, Pennsylvania , A. D. Glover and W. A. Bragonier. 1978. 131 p., 16 pls., geol. map, scale 1:24,000; coal resource maps, scale 1:48,000.....	25.00
A 65	Geology and mineral resources of the Punxsutawney quadrangle, Pennsylvania (Punxsutawney, McGees Mills, Rochester Mills, and Burnside 7.5-minute	

* Out of print; ‡ available online

	quadrangles, Jefferson, Indiana, and Clearfield Counties), G. H. Ashley. 1926; 2nd printing, 1969. 145 p., 6 pls., geol. map, min. resource map, scale 1:62,500.....	8.50
A 74ab	Geology and mineral resources of the Sabula and Penfield quadrangles, Clearfield, Elk, and Jefferson Counties, Pennsylvania , T. M. Berg and A. D. Glover. 1976. 98 p., 10 pls., geol. map, scale 1:24,000; coal reserve map, foundation and excavation map, scale 1:48,000.....	22.00
A 74cd	Geology and mineral resources of the southern half of the Penfield 15-minute quadrangle, Pennsylvania (Luthersburg and Elliott Park 7.5-minute quadrangles, Clearfield County), W. E. Edmunds and T. M. Berg. 1971; 2nd printing, 1973. 184 p., 22 pls., geol. map, scale 1:24,000; coal reserve maps, foundation and excavation map, scale 1:48,000.....	10.00
A 75	Geology and mineral resources of the Curwensville quadrangle (Mahaffey, Curwensville, Westover, and Irvona 7.5-minute quadrangles, Clearfield County), G. H. Ashley. 1940; 3rd printing, 1974. 140 p., 4 pls., geol. map, min. resource map, scale 1:62,500	7.00
A 84cd	Geology and mineral resources of the southern half of the Clearfield 15-minute quadrangle, Pennsylvania (Clearfield and Lecontes Mills 7.5-minute quadrangles, Clearfield County), A. D. Glover. 1970; 2nd printing, 1973. 139 p., 15 pls., geol. map, scale 1:24,000; coal reserve maps, foundation and excavation map, scale 1:48,000.....	9.00
A 85ab	Geology and mineral resources of the northern half of the Houtzdale 15-minute quadrangle, Pennsylvania (Glen Richey and Wallaceton 7.5-minute quadrangles, Clearfield County), W. E. Edmunds. 1968; 2nd printing, 1973. 150 p., 15 pls., geol. map, scale 1:24,000; coal reserve maps, scale 1:48,000	8.00
A 85cd	Geology and mineral resources of the Ramey and Houtzdale quadrangles, Clearfield and Centre Counties, Pennsylvania , G. B. Glass, W. E. Edmunds, V. C. Shepps, and others. 1977. 94 p., 10 pls., geol. map, scale 1:24,000; coal resource maps, foundation and excavation map, scale 1:48,000	22.00
A 86	Geology and mineral resources of the Blandburg, Tipton, Altoona, and Bellwood quadrangles, Blair, Cambria, Clearfield, and Centre Counties, Pennsylvania , R. T. Faill, A. D. Glover, and J. H. Way. 1989. 209 p., 10 pls., bedrock geol. map, scale 1:24,000; surficial geol. map, coal resource maps, scale 1:48,000.....	34.00
A 95a	Geology and mineral resources of the Philipsburg 7½-minute quadrangle, Centre and Clearfield Counties, Pennsylvania , G. B. Glass. 1972. 241 p., 20 pls., geol. map, scale 1:24,000; coal reserve maps, foundation and excavation map, scale 1:48,000	12.00
A 96	Tyrone quadrangle—Geology and mineral resources (Tyrone, Franklinville, Spruce Creek, and Alexandria 7.5-minute quadrangles, Blair, Huntingdon, and Centre Counties), Charles Butts, F. M. Swartz, and Bradford Willard. 1939. 118 p., 14 pls., geol. map, scale 1:62,500	*
A 109a	Bedrock and surficial geology of the McConnellsburg quadrangle, Pennsylvania (Fulton and Franklin Counties), K. L. Pierce. 1966; 2nd printing, 1974. 111 p., 3 pls., bedrock geol. map, surficial geol. map.....	*
A 119ab	Geology and mineral resources of northeastern Franklin County, Pennsylvania , S. I. Root. 1971; 3rd printing, 1992. 104 p., 2 pls., geol. map.....	13.50
A 119cd	Geology and mineral resources of southeastern Franklin County, Pennsylvania , S. I. Root. 1968. 118 p., 2 pls., geol. map.....	4.00
A 124a	Geology and mineral resources of the Lock Haven quadrangle, Clinton and Lycoming Counties, Pennsylvania , A. R. Taylor. 1977. Geol. map and text on 1 pl.	6.50

A 126	Geology and mineral resources of the Mifflintown quadrangle, Pennsylvania (Alfarata, McClure, Mifflintown, and Mexico 7.5-minute quadrangles, Juniata, Mifflin, and Snyder Counties), R. R. Conlin and D. M. Hoskins. 1962. 46 p., 2 pls., geol. map	6.00
A 127	Geology and mineral resources of the Loysville quadrangle, Pennsylvania (Spruce Hill, Ickesburg, Andersonburg, and Landisburg 7.5-minute quadrangles, Perry, Juniata, and Cumberland Counties), J. T. Miller. 1961. 47 p., 2 pls., geol. map	10.50
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W 31	Water resources of Lehigh County, Pennsylvania , C. R. Wood, H. N. Flippo, Jr., J. B. Lescinsky, and J. L. Barker. 1972. 263 p., 5 pls., geol. maps, scales 1:62,500 and 1:24,000	11.00
W 32	Summary ground-water resources of Clarion County, Pennsylvania , T. G. Newport. 1973. 42 p., 1 pl., geol. map, scale 1:125,000	*
W 33	Geology and ground-water resources of northern Mercer County, Pennsylvania , G. R. Schiner and G. E. Kimmel. 1976. 136 p., 2 pls., geol. maps, scale 1:24,000	20.50

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W 34	Summary ground-water resources of Armstrong County, Pennsylvania, C. W. Poth. 1973. 38 p., 1 pl., geol. map, scale 1:125,000	*
W 35	Summary ground-water resources of Allegheny County, Pennsylvania, J. T. Gallaher. 1973. 71 p., 1 pl., geol. map, scale 1:125,000	*
W 36	Summary ground-water resources of Butler County, Pennsylvania, C. W. Poth. 1973. 49 p., 1 pl., geol. map, scale 1:125,000	*
W 37	Summary ground-water resources of Westmoreland County, Pennsylvania, T. G. Newport. 1973. 49 p., 1 pl., geol. map, scale 1:125,000	*
W 38	Summary ground-water resources of Washington County, Pennsylvania, T. G. Newport. 1973. 32 p., 1 pl., geol. map, scale 1:125,000	*
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W 40	Summary ground-water resources of Luzerne County, Pennsylvania, T. G. Newport. 1977. 63 p., 1 pl., geol. map, scale 1:125,000	*
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W 43	Summary ground-water resources of Lancaster County, Pennsylvania, C. W. Poth. 1977. 80 p., 1 pl., geol. map, scale 1:125,000	*
W 44	Geology and groundwater resources of northern Berks County, Pennsylvania, C. R. Wood and D. B. MacLachlan. 1978; 2nd printing, 1992. 91 p., 2 pls., geol. map, scale 1:62,500	20.50
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W 53	Groundwater resources in the Cumberland and contiguous valleys of Franklin County, Pennsylvania, A. E. Becher and L. E. Taylor. 1982. 67 p., 1 pl., geol. map, scale 1:50,000	9.00

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W 63	Water resources and the effects of coal mining, Greene County, Pennsylvania , J. D. Stoner, D. R. Williams, T. F. Buckwalter, and others. 1987. 166 p., 2 pls., geol. map, scale 1:50,000	16.00
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SELECTED PUBLICATIONS

Pennsylvania geology. A quarterly (originally bimonthly) publication issued by the Bureau of Topographic and Geologic Survey. Generally 16 p., illustrated in two colors. Series begins with v. 1, no. 1, August 1969. Issues back to v. 28, no. 1/2, 1997, are available online	free ‡
Pennsylvania. Excerpts from U.S. Bureau of Mines Minerals Yearbook. Generally 8–12 p. Annual publication on nonfuel mineral production in Pennsylvania for the years 1988–91.....	free

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**PENNSYLVANIA TOPOGRAPHIC AND
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(Third Survey)**

SELECTED PUBLICATIONS

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11	The mineral production of Pennsylvania for the year 1913 . 1915. 108 p. .	*
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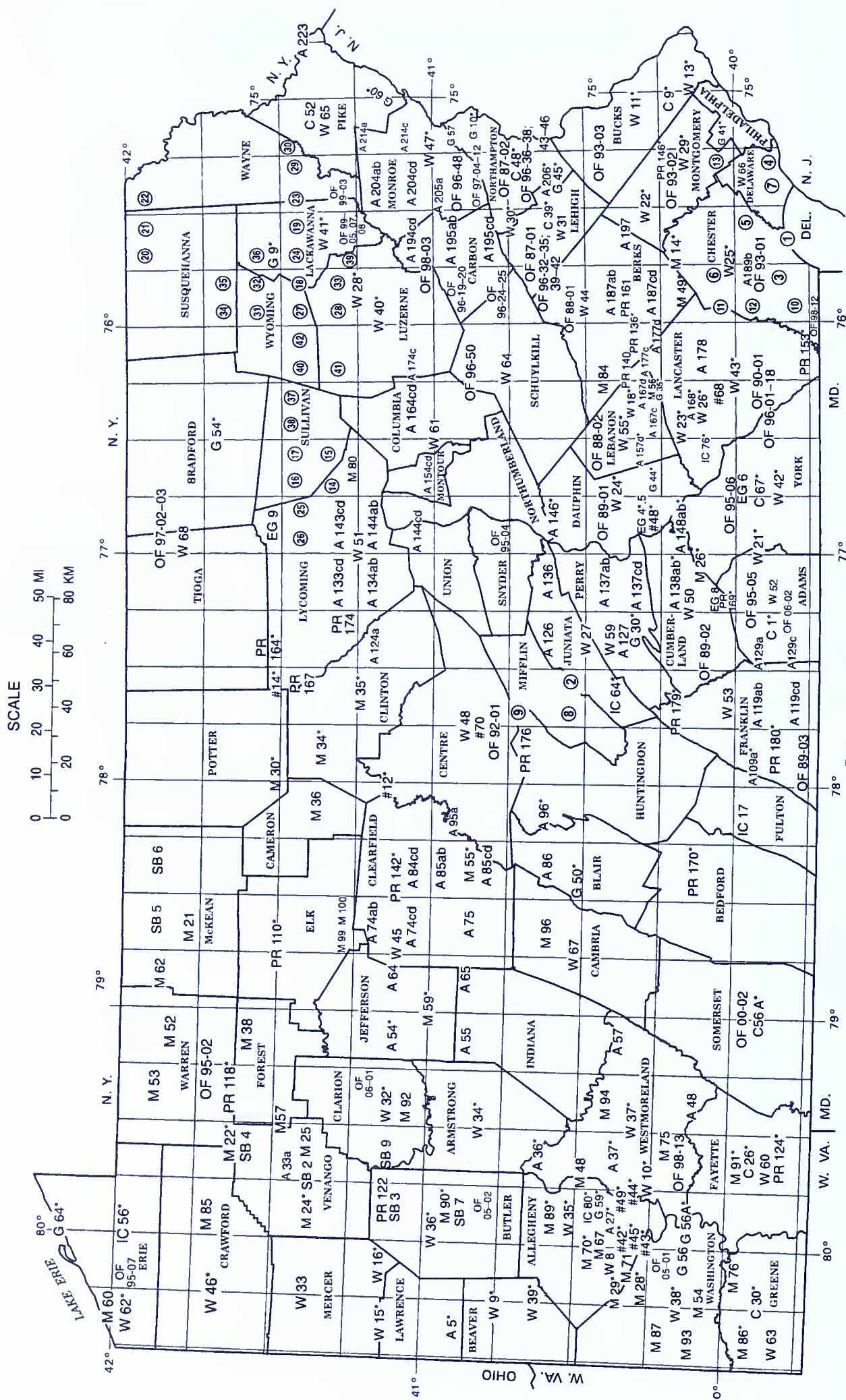
BIENNIAL REPORTS

(Reports contain mineral resource data.)

Report of Topographic and Geologic Survey Commission of Pennsylvania, 1910–1912 . 1912. 182 p., 21 pls.	*
Report of Topographic and Geologic Survey Commission of Pennsylvania, 1913–1914 . 1914. 232 p., 5 pls.	*

KEY TO AREAL REPORTS

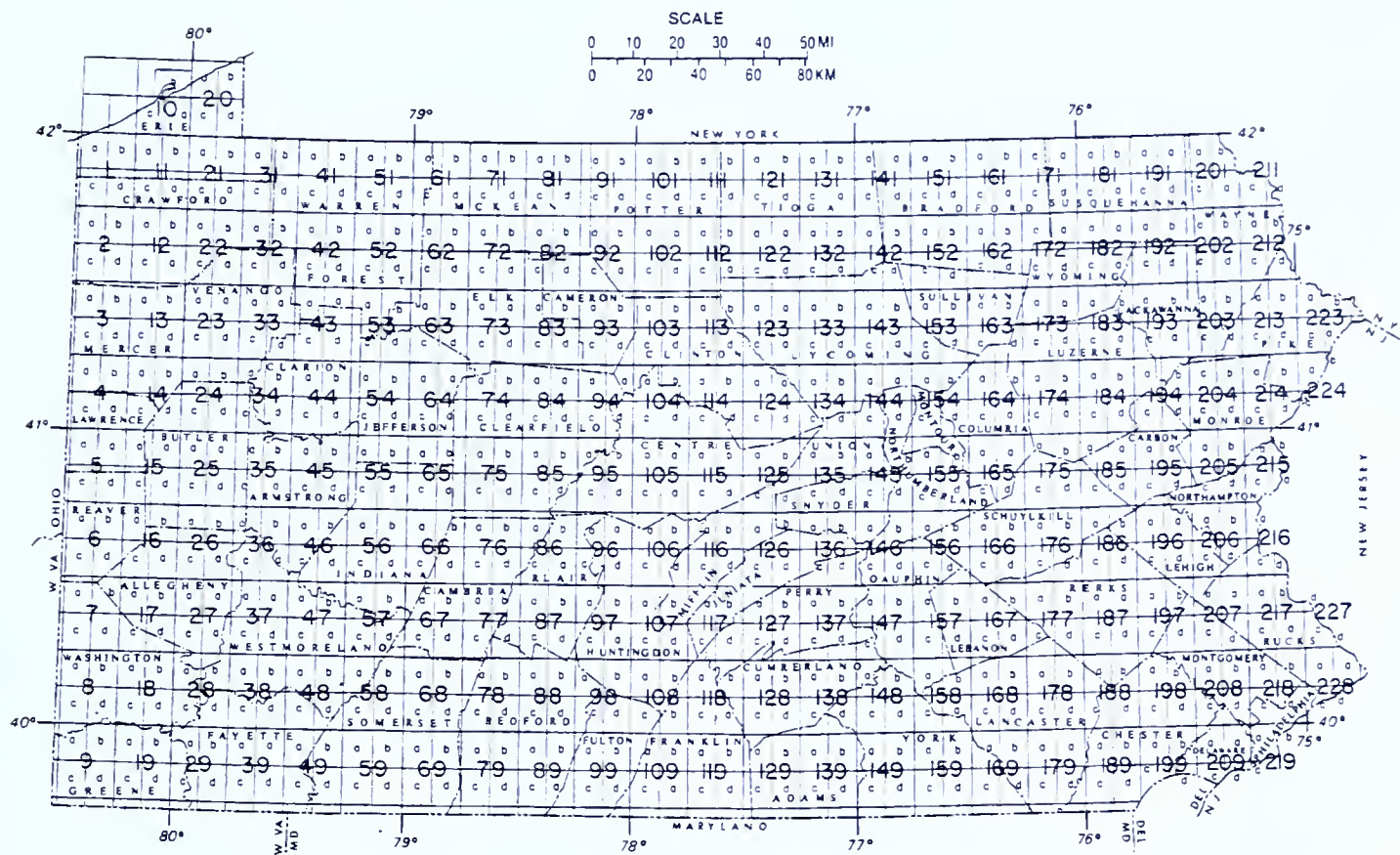
PR — Progress Report
SB — Special Bulletin
W — Water Resource Report
* — Out of print



EXPLANATION

- | | | | | | | | |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| ① OFBM 04-01.0 | ⑥ OFBM 05-05.0 | ⑪ OFBM 06-02.0 | ⑮ OFSM 05-01.0 | ⑳ OFSM 06-04.0 | ㉔ OFSM 06-09.0 | ㉘ OFSM 06-14.0 | ㉚ OFSM 07-01.0 |
| ② OFBM 04-02.0 | ⑦ OFBM 05-06.0 | ⑫ OFBM 06-03.0 | ⑯ OFSM 05-02.0 | ㉑ OFSM 06-05.0 | ㉕ OFSM 06-10.0 | ㉙ OFSM 06-15.0 | ㉛ OFSM 07-02.0 |
| ③ OFBM 05-01.0 | ⑧ OFBM 05-07.0 | ⑬ OFBM 06-04.0 | ⑰ OFSM 06-01.1 | ㉒ OFSM 06-06.0 | ㉖ OFSM 06-11.0 | ㉙ OFSM 06-16.1 | ㉜ OFSM 07-03.0 |
| ④ OFBM 05-02.0 | ⑨ OFBM 05-08.0 | ⑭ OFSM 04-01.1 | ⑱ OFSM 06-02.0 | ㉓ OFSM 06-07.0 | ㉗ OFSM 06-12.0 | ㉚ OFSM 06-17.0 | ㉝ OFSM 07-04.0 |

KEY TO QUADRANGLE NUMBERING SYSTEM



QUADRANGLE INDEX

The following list is to be used in conjunction with the index map above. The names of 15-minute quadrangles correspond to the numbered headings, and the associated 7.5-minute quadrangles correspond to the lettered headings. The index begins with the 15-minute quadrangle located in the upper left corner of the map.

- | | | | |
|---------------------|---------------------|-----------------------|-------------------|
| 1. Girard | 5. New Castle | 9. Rogersville | 13. Stoneboro |
| a. East Springfield | a. Bessemer | a. Wind Ridge | a. Hadley |
| b. Albion | b. New Castle South | b. Rogersville | b. New Lebanon |
| c. Beaver Center | c. New Galilee | c. New Freeport | c. Jackson Center |
| d. Conneautville | d. Beaver Falls | d. Holbrook | d. Sandy Lake |
| 2. Linesville | 6. Beaver | 10. Erie | 14. Mercer |
| a. Linesville | a. Midland | a-b. Erie North | a. Mercer |
| b. Harmonsburg | b. Beaver | c. Swanville | b. Grove City |
| c. Hartstown | c. Hookstown | d. Erie South | c. Harlansburg |
| d. Conneaut Lake | d. Aliquippa | | d. Slippery Rock |
| 3. Shenango | 7. Burgettstown | 11. Cambridge Springs | 15. Zelienople |
| a. Greenville West | a. Burgettstown | a. Edinboro North | a. Portersville |
| b. Greenville East | b. Clinton | b. Cambridge Springs | b. Prospect |
| c. Sharpsville | c. Avella | c. Edinboro South | c. Zelienople |
| d. Fredonia | d. Midway | d. Cambridge Springs | d. Evans City |
| 4. Neshannock | 8. Claysville | 12. Meadville | 16. Sewickley |
| a. Sharon East | a. West Middletown | a. Meadville | a. Baden |
| b. Greenfield | b. Washington West | b. Blooming Valley | b. Mars |
| c. Edinburg | c. Claysville | c. Geneva | c. Ambridge |
| d. New Castle North | d. Prosperity | d. Cochrannton | d. Emsworth |

17. Carnegie
 - a. Oakdale
 - b. Pittsburgh West
 - c. Canonsburg
 - d. Bridgeville
18. Amity
 - a. Washington East
 - b. Hackett
 - c. Amity
 - d. Ellsworth
19. Waynesburg
 - a. Waynesburg
 - b. Mather
 - c. Oak Forest
 - d. Garards Fort
20. North East
 - a. Harborcreek
 - b. North East
 - c. Hammett
 - d. Wattsburg
21. Union City
 - a. Waterford
 - b. Union City
 - c. Millers Station
 - d. Lake Canadohta
22. Townville
 - a. Townville
 - b. Centerville
 - c. Sugar Lake
 - d. Dempseytown
23. Franklin
 - a. Utica
 - b. Franklin
 - c. Polk
 - d. Kennerdell
24. Hilliards
 - a. Barkeyville
 - b. Eau Claire
 - c. West Sunbury
 - d. Hilliards
25. Butler
 - a. Mount Chestnut
 - b. East Butler
 - c. Butler
 - d. Saxonburg
26. New Kensington
 - a. Valencia
 - b. Curtisville
 - c. Glenshaw
 - d. New Kensington West
27. Pittsburgh
 - a. Pittsburgh East
 - b. Braddock
 - c. Glassport
 - d. McKeesport
28. Brownsville
 - a. Monongahela
 - b. Donora
 - c. California
 - d. Fayette City
29. Masontown
 - a. Carmichaels
 - b. New Salem
 - c. Masontown
 - d. Smithfield
31. Corry
 - a. Corry
 - b. Columbus
 - c. Spartansburg
 - d. Spring Creek
32. Titusville
 - a. Titusville North
 - b. Grand Valley
 - c. Titusville South
 - d. Pleasantville
33. Oil City
 - a. Oil City
 - b. President
 - c. Cranberry
 - d. Kossuth
34. Foxburg
 - a. Emlenton
 - b. Knox
 - c. Parker
 - d. Rimersburg
35. Kittanning
 - a. Chicora
 - b. East Brady
 - c. Worthington
 - d. Kittanning
36. Freeport
 - a. Freeport
 - b. Leechburg
 - c. New Kensington East
 - d. Vandergrift
37. Greensburg
 - a. Murrysville
 - b. Slickville
 - c. Irwin
 - d. Greensburg
38. Connellsville
 - a. Smithton
 - b. Mount Pleasant
 - c. Dawson
 - d. Connellsville
39. Uniontown
 - a. Uniontown
 - b. South Connellsville
 - c. Brownfield
 - d. Fort Necessity
41. Youngsville
 - a. Lottsville
 - b. Sugar Grove
 - c. Pittsfield
 - d. Youngsville
42. Tidioute
 - a. Tidioute
 - b. Cobham
 - c. West Hickory
 - d. Kellettville
43. Tionesta
 - a. Tionesta
 - b. Tylersburg
 - c. Fryburg
 - d. Lucinda
44. Clarion
 - a. Clarion
 - b. Strattanville
 - c. Sligo
 - d. New Bethlehem
45. Rural Valley
 - a. Templeton
 - b. Distant
 - c. Mosgrove
 - d. Rural Valley
46. Elders Ridge
 - a. Whitesburg
 - b. Elderton
 - c. Avonmore
 - d. McIntyre
47. Latrobe
 - a. Saltsburg
 - b. Blairsville
 - c. Latrobe
 - d. Derry
48. Donegal
 - a. Mammoth
 - b. Stahlstown
 - c. Donegal
 - d. Seven Springs
49. Confluence
 - a. Mill Run
 - b. Kingwood
 - c. Ohiopyle
 - d. Confluence
51. Warren
 - a. Russell
 - b. Scandia
 - c. Warren
 - d. Clarendon
52. Sheffield
 - a. Cherry Grove
 - b. Sheffield
 - c. Mayburg
 - d. Lynch
53. Marienville
 - a. Marienville West
 - b. Marienville East
 - c. Cooksburg
 - d. Sigel
54. Brookville
 - a. Corsica
 - b. Brookville
 - c. Summerville
 - d. Coolspring
55. Smicksburg
 - a. Dayton
 - b. Valier
 - c. Plumville
 - d. Marion Center
56. Indiana
 - a. Ernest
 - b. Clymer
 - c. Indiana
 - d. Brush Valley
57. New Florence
 - a. Bolivar
 - b. New Florence
 - c. Wilpen
 - d. Rachelwood
58. Somerset
 - a. Ligonier
 - b. Boswell
 - c. Bakersville
 - d. Somerset
59. Meyersdale
 - a. Rockwood
 - b. Murdock
 - c. Markleton
 - d. Meyersdale
61. Kinzua
 - a. Complanter Run
 - b. Stickney
 - c. Complanter Bridge
 - d. Westline
62. Kane
 - a. Ludlow
 - b. Kane
 - c. Russell City
 - d. James City
63. Hallton
 - a. Hallton
 - b. Portland Mills
 - c. Munderf
 - d. Carman
64. Du Bois
 - a. Hazen
 - b. Falls Creek
 - c. Reynoldsville
 - d. Du Bois
65. Punxsutawney
 - a. Punxsutawney
 - b. McGees Mills
 - c. Rochester Mills
 - d. Burnside
66. Barnesboro
 - a. Commodore
 - b. Barnesboro
 - c. Strongstown
 - d. Colver
67. Johnstown
 - a. Vintondale
 - b. Nanty Glo
 - c. Johnstown
 - d. Geistown
68. Windber
 - a. Hooversville
 - b. Windber
 - c. Stoystown
 - d. Central City
69. Berlin
 - a. Berlin
 - b. New Baltimore
 - c. Wittenberg
 - d. Fairhope
71. Bradford
 - a. Bradford
 - b. Derrick City
 - c. Lewis Run
 - d. Cyclone
72. Mt. Jewett
 - a. Mt. Jewett
 - b. Hazel Hurst
 - c. Wilcox
 - d. Glen Hazel
73. Ridgway
 - a. Ridgway
 - b. Saint Marys
 - c. Brandy Camp
 - d. Kersey

- | | | | |
|---|--|--|---|
| 74. Penfield
a. Sabula
b. Penfield
c. Luthersburg
d. Elliott Park | 88. Everett
a. New Enterprise
b. Hopewell
c. Everett West
d. Everett East | 103. Renovo West
a. Hammersley Fork
b. Tamarack
c. Keating
d. Renovo West | 117. East Waterford
a. McVeytown
b. McCoysville
c. Blairs Mills
d. Blain |
| 75. Curwensville
a. Mahaffey
b. Curwensville
c. Westover
d. Irvona | 89. Clearville
a. Clearville
b. Mench
c. Chaneyville
d. Amaranth | 104. Snow Shoe
a. Snow Shoe NW
b. Snow Shoe NE
c. Snow Shoe
d. Snow Shoe SE | 118. Shippensburg
a. Doylesburg
b. Newburg
c. Roxbury
d. Shippensburg |
| 76. Patton
a. Hastings
b. Coalport
c. Carrolltown
d. Ashville | 91. Coudersport
a. Shinglehouse
b. Oswayo
c. Roulette
d. Coudersport | 105. Bellefonte
a. Bear Knob
b. Bellefonte
c. Julian
d. State College | 119. Chambersburg
a. Chambersburg
b. Scotland
c. Greencastle
d. Waynesboro |
| 77. Ebensburg
a. Ebensburg
b. Cresson
c. Beaverdale
d. Blue Knob | 92. Emporium
a. Keating Summit
b. Austin
c. Emporium
d. Wharton | 106. Allensville
a. Pine Grove Mills
b. McAlevys Fort
c. Donation
d. Allensville | 121. Elkland
a. Knoxville
b. Elkland
c. Asaph
d. Keeneyville |
| 78. Bedford
a. Ogletown
b. Alum Bank
c. Schellsburg
d. Bedford | 93. Driftwood
a. Cameron
b. First Fork
c. Driftwood
d. Sinnemahoning | 107. Mt. Union
a. Mount Union
b. Newton Hamilton
c. Butler Knob
d. Aughwick | 122. Antrim
a. Tiadaghton
b. Antrim
c. Cedar Run
d. Morris |
| 79. Hyndman
a. Buffalo Mills
b. Rainsburg
c. Hyndman
d. Beans Cove | 94. Karthaus
a. Devils Elbow
b. Pottersdale
c. Frenchville
d. Karthaus | 108. Orbisonia
a. Orbisonia
b. Shade Gap
c. Burnt Cabins
d. Fannettsburg | 123. Waterville
a. Cammal
b. English Center
c. Jersey Mills
d. Waterville |
| 81. Smethport
a. Eldred
b. Bullis Mills
c. Smethport
d. Port Allegany | 95. Philipsburg
a. Philipsburg
b. Black Moshannon
c. Sandy Ridge
d. Port Matilda | 109. Mercersburg
a. McConnellsburg
b. St. Thomas
c. Mercersburg
d. Williamson | 124. Lock Haven
a. Lock Haven
b. Jersey Shore
c. Mill Hall
d. Loganton |
| 82. Crosby
a. Crosby
b. Norwich
c. Wildwood Fire Tower
d. Rich Valley | 96. Tyrone
a. Tyrone
b. Franklinville
c. Spruce Creek
d. Alexandria | 111. Gaines
a. Harrison Valley
b. Potter Brook
c. West Pike
d. Sabinsville | 125. Millheim
a. Millheim
b. Woodward
c. Coburn
d. Weikert |
| 83. Benezette
a. Rathbun
b. West Creek
c. Weedville
d. Dents Run | 97. Huntingdon
a. Williamsburg
b. Huntingdon
c. Entriken
d. Cassville | 112. Galeton
a. Galeton
b. Marshlands
c. Oleona
d. Lee Fire Tower | 126. Mifflintown
a. Alfarata
b. McClure
c. Mifflintown
d. Mexico |
| 84. Clearfield
a. Huntley
b. The Knobs
c. Clearfield
d. Lecontes Mills | 98. Broad Top
a. Saxton
b. Saltillo
c. Wells Tannery
d. Hustontown | 113. Renovo East
a. Young Womans Creek
b. Slate Run
c. Renovo East
d. Glen Union | 127. Loysville
a. Spruce Hill
b. Ickesburg
c. Andersonburg
d. Landisburg |
| 85. Houtzdale
a. Glen Richey
b. Wallaceton
c. Ramey
d. Houtzdale | 99. Needmore
a. Breezewood
b. Meadow Grounds
c. Needmore
d. Big Cove Tannery | 114. Howard
a. Howard NW
b. Farrandsville
c. Howard
d. Beech Creek | 128. Newville
a. Newville
b. Plainfield
c. Walnut Bottom
d. Dickinson |
| 86. Altoona
a. Blandburg
b. Tipton
c. Altoona
d. Bellwood | 101. Genesee
a. Ellisburg
b. Ulysses
c. Sweden Valley
d. Brookland | 115. Centre Hall
a. Mingoville
b. Madisonburg
c. Centre Hall
d. Spring Mills | 129. Fairfield
a. Caledonia Park
b. Arendtsville
c. Iron Springs
d. Fairfield |
| 87. Hollidaysburg
a. Hollidaysburg
b. Frankstown
c. Roaring Spring
d. Martinsburg | 102. Conrad
a. Ayers Hill
b. Cherry Springs
c. Conrad
d. Short Run | 116. Lewistown
a. Barrville
b. Burnham
c. Belleville
d. Lewistown | 131. Tioga
a. Tioga
b. Jackson Summit
c. Crooked Creek
d. Mansfield |

- | | | | |
|---|--|---|--|
| 132. Blossburg
a. Cherry Flats
b. Blossburg
c. Nauvoo
d. Liberty | 146. Millersburg
a. Dalmatia
b. Pillow
c. Millersburg
d. Elizabethville | 161. Towanda
a. Litchfield
b. Windham
c. Towanda
d. Rome | 175. Mahanoy
a. Nuremberg
b. Conyngham
c. Shenandoah
d. Delano |
| 133. Trout Run
a. White Pine
b. Trout Run
c. Salladasburg
d. Cogan Station | 147. Harrisburg
a. Halifax
b. Enders
c. Harrisburg West
d. Harrisburg East | 162. Monroeton
a. Monroeton
b. Wyalusing
c. Dushore
d. Colley | 176. Pottsville
a. Pottsville
b. Orwigsburg
c. Friedensburg
d. Auburn |
| 134. Williamsport
a. Linden
b. Williamsport
c. Carroll
d. Williamsport SE | 148. New Cumberland
a. Lemoyne
b. Steelton
c. Wellsville
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Much additional information on Pennsylvania geology is available in publications not covered in this list. The reader is referred to Pennsylvania Geological Survey General Geology Reports 34, 42, 61, and 73 for a more comprehensive list of articles on Pennsylvania geology written before 1979.

Abbreviations used in this index are as follows:

Pennsylvania Third (Commission) Survey—Pa. Geol. Survey (3rd)

Pennsylvania Geological Survey, fourth series—Pa. Geol. Survey (4th)

A — Atlas Series	Map — Map
C — County Report	OF — Open-File Report
EG — Environmental Geology Report	PG — Park Guide
ES — Educational Series	PR — Progress Report
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